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Title

**DEVICE AND METHOD FOR GENERATING EXTENDING CODE AND FOR CHANNEL-SIGNAL SPECTRUM  
EXTENSION USING EXTENDING CODE IN CODE-DIVISION MULTIPLE ACCESS COMMUNICATION SYSTEM**

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**ABSTRACT**

FIELD: mobile code-division multiple access communication systems. SUBSTANCE: device has pseudonoise (PN) code sequence generator for shaping  $PN_i$  and  $PN_q$  sequences; orthogonal code generator affording change of differential phase keying phase with intervals of at least two code items; and generator shaping extending codes  $C_i$  and  $C_q$  by mixing up (221, 223, 224)  $C_i$  and  $C_q$  code sequences with first and second orthogonal codes so that current phase of extending codes  $PN_i$  and  $PN_q$  changes in turn state of quadrature phase keying and differential phase keying with respect to preceding phase of extending codes  $C_i$  and  $C_q$ . EFFECT: reduced maximal-to-medium power ratio without impairing bit error rate characteristic. 27 cl, 22 dwg